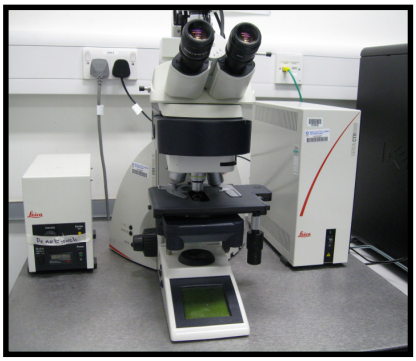
OPERATING INSTRUCTIONS



LEICA DM5000 epi-fl microscope

You must not operate this equipment without prior training from a BALM facility staff member.

To arrange training and for help please contact:

Dr Ann Wheeler	ext: 2406	a.p.wheeler@qmul.ac.uk
Dr Katy Cogger	ext: 2407	k.f.cogger@qmul.ac.uk
Isma Ali	ext: 2407	i.ali@qmul.ac.uk

Standard Operating Procedure — Colour

How to turn the equipment on:

1. Switch on the Leica controller box
2. Switch on the computer and log in

How to turn the equipment off:

1. Switch off the computer
2. Switch off the Leica controller box

Rules of use:

This microscope should be treated with respect and care at all times.

This Microscope can only be used by Masters by Research or PhD students, Postdocs and members of staff.

The microscope lenses must be cleaned after every usage and the equipment treated carefully at all times.

If you have any problems at all with the microscope, no matter how trivial they may seem please see a technician immediately.

REMEMBER: You have 2GB of disk space on this microscope. Check before you start if you have room for your experiment. If not, delete your old data.

1) Open **LAS** software

NB: The software takes a while to load

2) Place slide on microscope stage and choose objective lens

Objectives available:

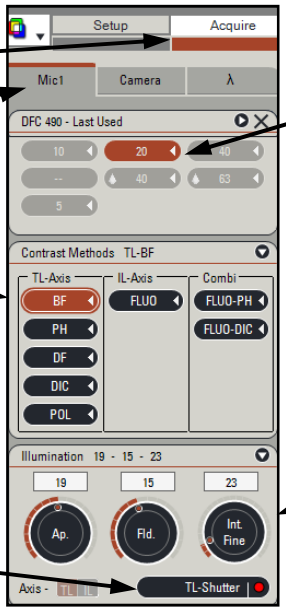
4x, 10x, 20x, 40x – air
oil objectives available on request

Move by hand, not automated

NB: please LOWER THE STAGE before changing between objectives (to avoid crashing lens onto slide)

3) Check rod on LHS is pushed IN to direct the light to the eyepiece

4) In **Acquire**, select the **Mic1** tab and **BF**



This section tells you which objective you are using

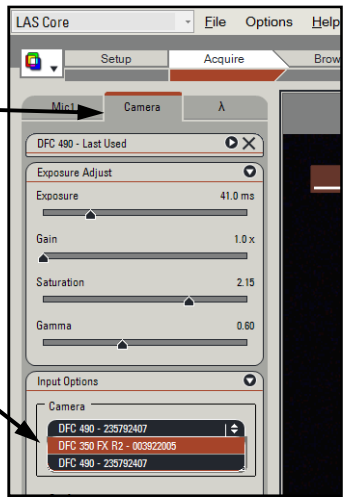
These dials control aperture, field diaphragm and light intensity, check they are not zero.

5) Open the shutter and find your sample

6) Pull OUT rod on LHS to direct light to the camera

7) Check rod on RHS is pushed IN to use the colour camera

8) In the **Camera** tab
choose the **DFC490** camera

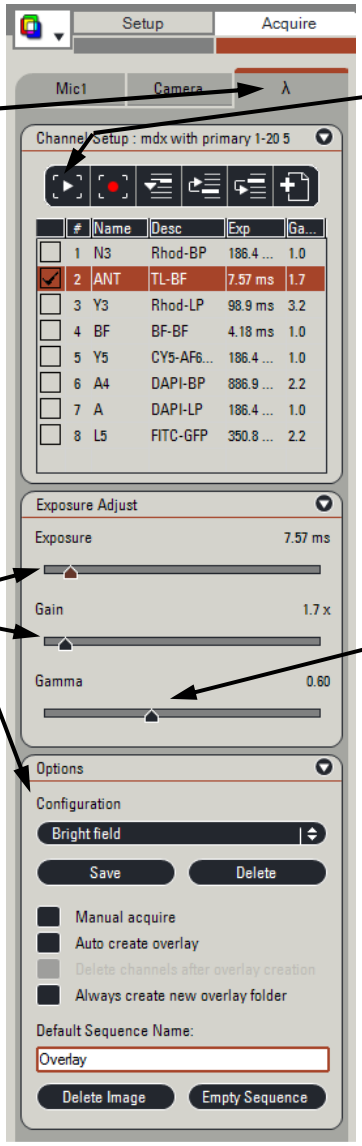


9) In the **λ** tab
select the **Brightfield** configuration

This button can be used to open and close the shutter

10) Adjust the **Exposure** and **Gain**

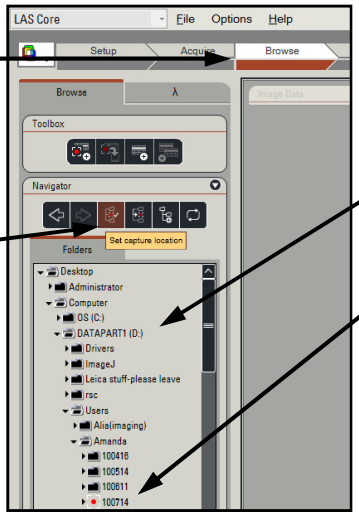
Gamma should be set at 0.6 for colour images



11) In the **Camera** tab
use **Auto white balance** on a blank area of your slide

If needed, there is an **auto exposure** tool here

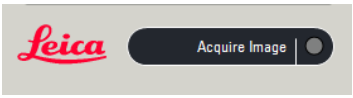
11) In the **Browse** menu, select a folder to save your data by clicking the **Set capture location** button



Data should be saved on the D drive.

Folder selected is indicated by the red dot.

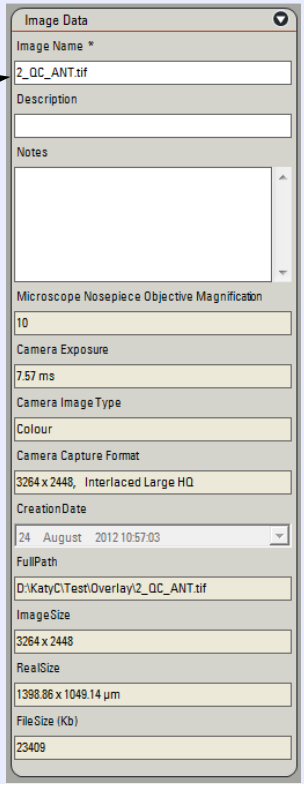
16) In the **Acquire** tab
click **Acquire Image**



In the **Browse** menu you can rename your images

↘

Type a new name in in **Image name** box and click anywhere outside the box



15) Go back to the **Acquire** menu to take the next picture

When you have finished, transfer all your data to the **Z network drive**

PLEASE TIDY UP!!
Clean lenses, throw away used tissue/lens tissue, dispose of old slides in the yellow sharps bin